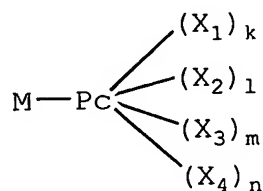
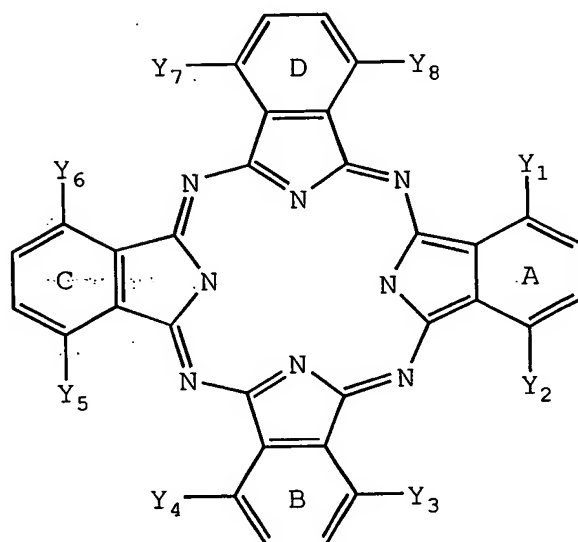


CLAIMS

1. A dye mixture comprising a plurality of different dyes represented by the following formula (I):



Formula (II):

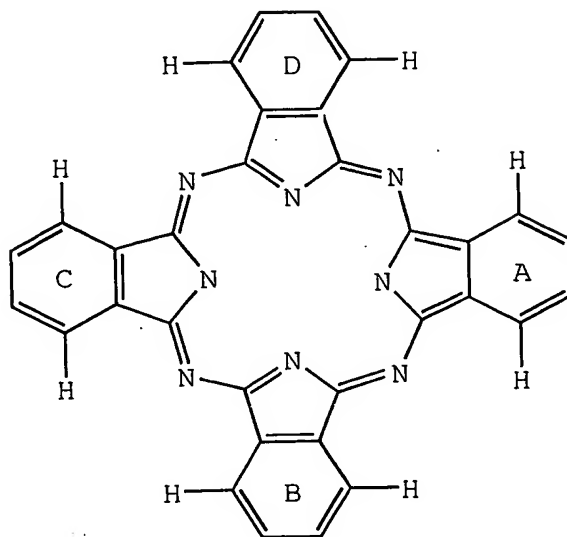


wherein M represents a hydrogen atom, a metal atom or an oxide, hydroxide or halide thereof; Pc represents a (k+l+m+n)-valent phthalocyanine nucleus represented by formula (II); X_1 , X_2 , X_3 and X_4 each independently represents a substituent selected from the group consisting of $-\text{SO}-\text{R}_1$, $-\text{SO}_2-\text{R}_1$, $-\text{SO}_2\text{NR}_2\text{R}_3$, $-\text{CONR}_2\text{R}_3$, $-\text{CO}_2-\text{R}_1$

and CO-R₁ and at least one substituent represented by X₁, at least one substituent represented by X₂, at least one substituent represented by X₃ and at least one substituent represented by X₄ are present in respective rings of four benzene rings {A, B, C and D in formula (II)} of the phthalocyanine nucleus, provided that the case where X₁, X₂, X₃ and X₄ all are the same is excluded and at least one of X₁, X₂, X₃ and X₄ has an ionic hydrophilic group as a substituent; R₁ represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group; R₂ represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group; R₃ represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group; k, l, m and n represent an integer of $0 < k < 8$, an integer of $0 < l < 8$, an integer of $0 \leq m < 8$ and an integer of $0 \leq n < 8$, provided that k and/or l and/or m and/or n each independently represents a number satisfying $4 \leq k + l + m + n \leq 8$; and Y₁, Y₂, Y₃, Y₄, Y₅, Y₆, Y₇ and Y₈ each independently represents a hydrogen atom and/or a monovalent substituent and these monovalent substituents each may further have a substituent.

2. The dye mixture as claimed in claim 1, wherein the phthalocyanine nucleus represented by formula (II) is represented by the following formula (III):

Formula (III):

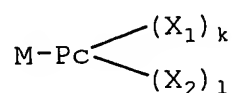


3. The dye mixture as claimed in claim 1, wherein in the dye represented by formula (I), X_1 , X_2 , X_3 and X_4 each independently represents a substituent selected from the group consisting of $-SO-R_1$, $-SO_2-R_1$ and $-SO_2NR_2R_3$, and at least one substituent represented by X_1 , at least one substituent represented by X_2 , at least one substituent represented by X_3 and at least one substituent represented by X_4 are present in respective rings of four benzene rings (A, B, C and D in formula (II))

or (III)) of the phthalocyanine nucleus.

4. The dye mixture as claimed in claim 1, wherein the dye represented by formula (I) is represented by the following formula (IV):

Formula (IV):



wherein M represents a hydrogen atom, a metal atom or an oxide, hydroxide or halide thereof; Pc represents a (k+1)-valent phthalocyanine nucleus represented by formula (III); X_1 and X_2 each independently represents a substituent selected from the group consisting of -SO- R_1 , -SO₂- R_1 and -SO₂NR₂R₃ and at least one substituent represented by X_1 and at least one substituent represented by X_2 are present in respective rings of four benzene rings {A, B, C and D in formula (III)} of the phthalocyanine nucleus, provided that X_1 and X_2 are not the same and at least one of X_1 and X_2 has an ionic hydrophilic group as a substituent; R_1 represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group; R_2 represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted

aryl group or a substituted or unsubstituted heterocyclic group; R_3 represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group; k and l represent an integer of $0 < k < 8$ and an integer of $0 < l < 8$, provided that k and/or l each independently represents a number satisfying $4 \leq k + l \leq 8$.

5. The dye mixture as claimed in claim 1, wherein in formulae (I) and (II), at least one group of X_1 to X_4 and Y_1 to Y_8 has at least one asymmetric carbon.

6. An ink comprising the dye mixture claimed in claim 1.

7. An ink as claimed in claim 6, which is used as an ink for ink jet recording.

8. An ink jet recording method comprising forming an image using the ink claimed in claim 7 on an image-receiving material comprising a support having thereon an ink image-receiving layer containing a white inorganic pigment particle.

9. A method for improving ozone resistance of a colored image material, comprising forming an image using the ink claimed in claim 7.